

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTASXJ1617

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'CAPLUS' AT 11:18:56 ON 27 MAR 2009  
FILE 'CAPLUS' ENTERED AT 11:18:56 ON 27 MAR 2009  
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)  
COST IN U.S. DOLLARS

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	4.24	19.92

=> file reg

COST IN U.S. DOLLARS

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	4.24	19.92

FILE 'REGISTRY' ENTERED AT 11:19:10 ON 27 MAR 2009  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 25 MAR 2009 HIGHEST RN 1127021-37-7  
DICTIONARY FILE UPDATES: 25 MAR 2009 HIGHEST RN 1127021-37-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

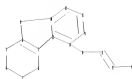
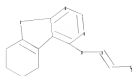
Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10575683.str



```

chain nodes :
16 17 18 19
ring nodes :
3 4 5 6 7 8 9 10 11 12 13 14 15
chain bonds :
15-16 16-17 17-18 18-19
ring bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 10-11 10-12 11-15 12-13 13-14
14-15
exact/norm bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 15-16 16-17 17-18 18-19
normalized bonds :
10-11 10-12 11-15 12-13 13-14 14-15

```

G1: Ak, Hy, Cb

G2: Ak, H

```

Match level :
3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS

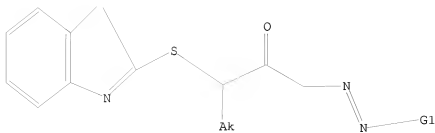
```

L7 STRUCTURE UPLOADED

=> d 17

L7 HAS NO ANSWERS

L7 STR



G1 Ak,Hy,Cb

Structure attributes must be viewed using STN Express query preparation.

=> s l7 full

FULL SEARCH INITIATED 11:19:33 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 89 TO ITERATE

100.0% PROCESSED 89 ITERATIONS

0 ANSWERS

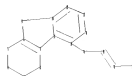
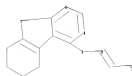
SEARCH TIME: 00.00.01

L8

0 SEA SSS FUL L7

=>

Uploading C:\Program Files\Stnexp\Queries\10575683.str



chain nodes :

16 17 18 19

ring nodes :

3 4 5 6 7 8 9 10 11 12 13 14 15

```

chain bonds :
15-16 16-17 17-18 18-19
ring bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 10-11 10-12 11-15 12-13 13-14
14-15
exact/norm bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 15-16 16-17 17-18 18-19
normalized bonds :
10-11 10-12 11-15 12-13 13-14 14-15

```

G1: Ak, Hy, Cb

G2: Ak, H

```

Match level :
3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS

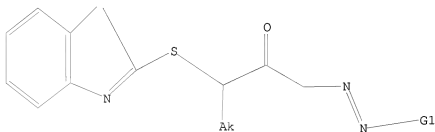
```

L9 STRUCTURE UPLOADED

=> d 18

L8 HAS NO ANSWERS

L7 STR

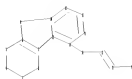
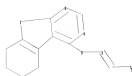


G1 Ak, Hy, Cb

Structure attributes must be viewed using STN Express query preparation.  
L8 0 SEA FILE=REGISTRY SSS FUL L7

=>

Uploading C:\Program Files\Stnexp\Queries\10575683.str



```

chain nodes :
16 17 18 19
ring nodes :
3 4 5 6 7 8 9 10 11 12 13 14 15
chain bonds :
15-16 16-17 17-18 18-19
ring bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 10-11 10-12 11-15 12-13 13-14
14-15
exact/norm bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 15-16 16-17 17-18 18-19
normalized bonds :
10-11 10-12 11-15 12-13 13-14 14-15

```

G1: Ak, Hy, Cb

G2: Ak, H

```

Match level :
3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS

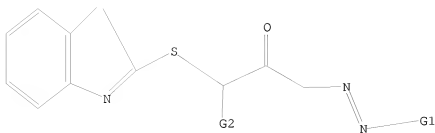
```

L10 STRUCTURE UPLOADED

=> d l10

L10 HAS NO ANSWERS

L10 STR



G1 Ak,Hy,Cb

G2 Ak,H

Structure attributes must be viewed using STN Express query preparation.

=> s l10 full

FULL SEARCH INITIATED 11:21:58 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 89 TO ITERATE

100.0% PROCESSED 89 ITERATIONS

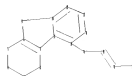
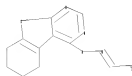
0 ANSWERS

SEARCH TIME: 00.00.01

L11 0 SEA SSS FUL L10

=>

Uploading C:\Program Files\Stnexp\Queries\10575683.str



chain nodes :

16 17 18 19

ring nodes :

3 4 5 6 7 8 9 10 11 12 13 14 15

```

chain bonds :
15-16 16-17 17-18 18-19
ring bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 10-11 10-12 11-15 12-13 13-14
14-15
exact/norm bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 15-16 16-17 17-18 18-19
normalized bonds :
10-11 10-12 11-15 12-13 13-14 14-15

```

G1: Ak, Hy, Cb

G2: Ak, H

Match level :

```

3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS

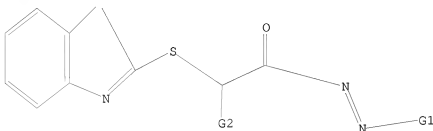
```

L12 STRUCTURE UPLOADED

=> d l12

L12 HAS NO ANSWERS

L12 STR



G1 Ak, Hy, Cb

G2 Ak, H

Structure attributes must be viewed using STN Express query preparation.

=> s l12 full

FULL SEARCH INITIATED 11:23:11 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 3030 TO ITERATE

100.0% PROCESSED 3030 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.01

L13 3 SEA SSS FUL L12

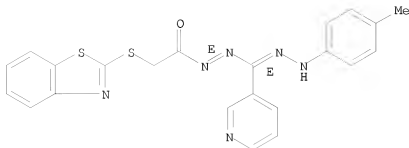
=> d scan

L13 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN Ethanone, 2-(2-benzothiazolylthio)-1-[(1E)-2-[(E)-[2-(4-methylphenyl)hydrazinylidene]-3-pyridinylmethyl]diazanyl]-

MF C22 H18 N6 O S2

Double bond geometry as shown.

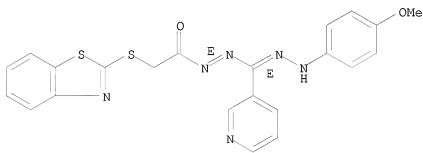


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L13 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Ethanone, 2-(2-benzothiazolythio)-1-[(1E)-2-[(E)-[2-(4-  
 methoxyphenyl)hydrazinylidene]-3-pyridinylmethyl]diazenyl]-  
 MF C22 H18 N6 O2 S2

Double bond geometry as shown.

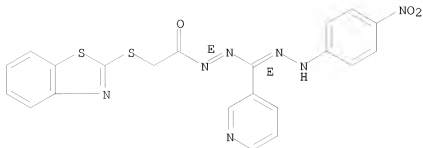


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L13 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Ethanone, 2-(2-benzothiazolythio)-1-[(1E)-2-[(E)-[2-(4-  
 nitrophenyl)hydrazinylidene]-3-pyridinylmethyl]diazenyl]-  
 MF C21 H15 N7 O3 S2

Double bond geometry as shown.





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus  
 COST IN U.S. DOLLARS  
 FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
559.56	579.48

FILE 'CAPLUS' ENTERED AT 11:23:35 ON 27 MAR 2009  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Mar 2009 VOL 150 ISS 14  
 FILE LAST UPDATED: 26 Mar 2009 (20090326/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l13  
 L14 0 L13

=> file reg  
 COST IN U.S. DOLLARS  
 FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
1.00	580.48

FILE 'REGISTRY' ENTERED AT 11:24:45 ON 27 MAR 2009  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 25 MAR 2009 HIGHEST RN 1127021-37-7  
DICTIONARY FILE UPDATES: 25 MAR 2009 HIGHEST RN 1127021-37-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

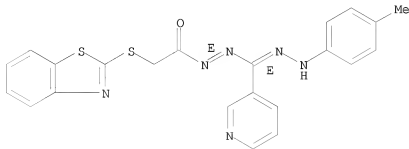
REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d l13

L13 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 1027183-58-9 REGISTRY  
ED Entered STN: 11 Jun 2008  
CN Ethanone, 2-(2-benzothiazolylthio)-1-[(1E)-2-[(E)-[2-(4-  
methylphenyl)hydrazinylidene]-3-pyridinylmethyl]diazanyl]- (CA INDEX  
NAME)  
FS STEREOSEARCH  
MF C22 H18 N6 O S2  
SR Other Sources  
Database: ChemSpider (ChemZoo, Inc.)

Double bond geometry as shown.



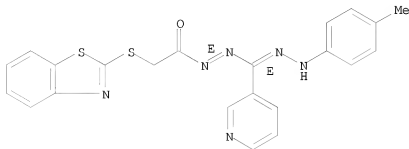
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

=> d l13 1-3

L13 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2009 ACS on STN

RN 1027183-58-9 REGISTRY  
 ED Entered STN: 11 Jun 2008  
 CN Ethanone, 2-(2-benzothiazolylthio)-1-[(1E)-2-[(E)-[2-(4-methylphenyl)hydrazinylidene]-3-pyridinylmethyl]diazenyl]- (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C22 H18 N6 O S2  
 SR Other Sources  
 Database: ChemSpider (ChemZoo, Inc.)

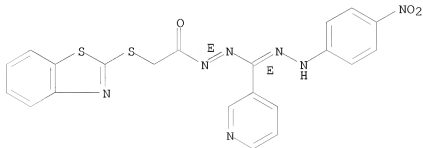
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L13 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 1027065-17-3 REGISTRY  
 ED Entered STN: 10 Jun 2008  
 CN Ethanone, 2-(2-benzothiazolylthio)-1-[(1E)-2-[(E)-[2-(4-nitrophenyl)hydrazinylidene]-3-pyridinylmethyl]diazenyl]- (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C21 H15 N7 O3 S2  
 SR Other Sources  
 Database: ChemSpider (ChemZoo, Inc.)

Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L13 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2009 ACS on STN  
 RN 1026372-33-7 REGISTRY  
 ED Entered STN: 08 Jun 2008  
 CN Ethanone, 2-(2-benzothiazolylthio)-1-[(1E)-2-[(E)-[2-(4-

methoxyphenyl)hydrazinylidene]-3-pyridinylmethyl]diazenyl]- (CA INDEX  
NAME)

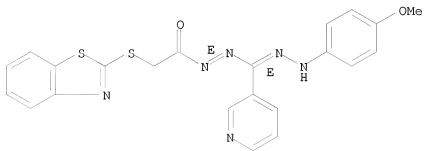
FS STEREOSEARCH

MF C22 H18 N6 O2 S2

SR Other Sources

Database: ChemSpider (ChemZoo, Inc.)

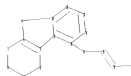
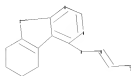
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

=>

Uploading C:\Program Files\Stnexp\Queries\10575683.str



chain nodes :

16 17 18 19

ring nodes :

3 4 5 6 7 8 9 10 11 12 13 14 15

```

chain bonds :
15-16 16-17 17-18 18-19
ring bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 10-11 10-12 11-15 12-13 13-14
14-15
exact/norm bonds :
3-4 3-8 4-5 5-6 6-7 6-9 7-8 7-11 9-10 15-16 16-17 17-18 18-19
normalized bonds :
10-11 10-12 11-15 12-13 13-14 14-15

```

G1: Ak, Hy, Cb

G2: Ak, H

```

Match level :
3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS

```

L15 STRUCTURE UPLOADED

```

=> s l15 full
FULL SEARCH INITIATED 11:31:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2677 TO ITERATE

```

```

100.0% PROCESSED 2677 ITERATIONS 353 ANSWERS
SEARCH TIME: 00.00.01

```

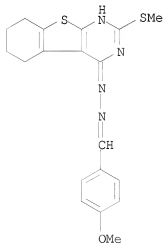
L16 353 SEA SSS FUL L15

=> d scan

```

L16 353 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Benzaldehyde, 4-methoxy-, 2-[5,6,7,8-tetrahydro-2-
(methylthio)[1]benzothieno[2,3-d]pyrimidin-4-yl]hydrazone
MF C19 H20 N4 O S2

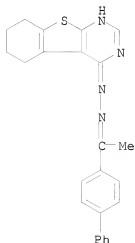
```



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L16 353 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN INDEX NAME NOT YET ASSIGNED  
MF C24 H22 N4 S



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

199.36

779.84

FILE 'CAPLUS' ENTERED AT 11:32:08 ON 27 MAR 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Mar 2009 VOL 150 ISS 14

FILE LAST UPDATED: 26 Mar 2009 (20090326/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l16

L17 23 L16

=> d l17 ibib abs hitstr 1-23

L17 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:6176 CAPLUS

DOCUMENT NUMBER: 150:260127

TITLE: Discovery of novel thieno[2,3-d]pyrimidin-4-yl  
hydrazone-based inhibitors of Cyclin D1-CDK4:  
Synthesis, biological evaluation, and  
structure-activity relationships

AUTHOR(S): Horiuchi, Takao; Chiba, Jun; Uoto, Kouichi; Soga,  
Tsunehiko

CORPORATE SOURCE: Medicinal Chemistry Research Laboratory II, Daiichi  
Sankyo Co. Ltd., 16-13, Kita-Kasai 1-Chome,  
Edogawa-ku, Tokyo, 134-8630, Japan

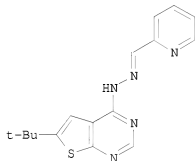
SOURCE: Bioorganic & Medicinal Chemistry Letters (2009),  
19(2), 305-308  
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

AB The synthesis and evaluation of analogs of thieno[2,3-d]pyrimidin-4-yl  
hydrazones, e.g., I, are described. 2-Pyridinecarboxaldehyde  
[6-(tert-butyl)thieno[2,3-d]pyrimidine-4-yl]hydrazone derivs. have been  
identified as cyclin-dependent kinase 4 (CDK4) inhibitors. The potency,  
selectivity profile, and structure-activity relationship of this series of  
comps. are discussed.

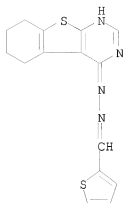
IT 81154-31-6P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic  
preparation); BIOL (Biological study); PREP (Preparation)  
(preparation cyclin D1-CDK4 inhibitory and antitumor activities and SAR of  
thienopyrimidinyl hydrazones using hydrazination of thienopyrimidinones  
and condensation with carbonyl comps. as the key steps)

RN 81154-31-6 CAPLUS

CN 2-Thiophenecarboxaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-

d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1034502 CAPLUS

DOCUMENT NUMBER: 149:442212

TITLE: The secretion inhibitor Exo2 perturbs trafficking of Shiga toxin between endosomes and the trans-Golgi network

AUTHOR(S): Spooner, Robert A.; Watson, Peter; Smith, Daniel C.; Boal, Frederic; Amessou, Mohammed; Johannes, Ludger; Clarkson, Guy J.; Lord, J. Michael; Stephens, David J.; Roberts, Lynne M.

CORPORATE SOURCE: Department of Biological Sciences, University of Warwick, Coventry, CV4 7AL, UK

SOURCE: Biochemical Journal (2008), 414(3), 471-484

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The small-mol. inhibitor Exo2 {4-hydroxy-3-methoxy-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone benzaldehyde} has been reported to disrupt the Golgi apparatus completely and to stimulate Golgi-ER (endoplasmic reticulum) fusion in mammalian cells, akin to the well-characterized fungal toxin BFA (brefeldin A). It has also been reported that Exo2 does not affect the integrity of the TGN (trans-Golgi network), or the direct retrograde trafficking of the glycolipid-binding cholera toxin from the TGN to the ER lumen. The authors have examined the effects of BFA and Exo2, and found that both compds. are indistinguishable in their inhibition of anterograde transport and that both reagents significantly disrupt the morphol. of the TGN in HeLa and in BS-C-1 cells. However, Exo2, unlike BFA, does not induce tubulation and merging of the TGN and endosomal compartments. Furthermore, and in contrast with its effects on cholera toxin, Exo2 significantly perturbs the delivery of Shiga toxin to the ER. Together, these results suggest that the likely target(s) of Exo2 operate at the level of the TGN, the Golgi and a subset of early endosomes, and thus Exo2 provides a more selective tool than BFA for examining membrane trafficking in mammalian cells.

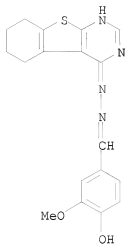
IT 304684-77-3, Exo2

RL: BSU (Biological study, unclassified); BIOL (Biological study) (the secretion inhibitor Exo2 perturbs trafficking of Shiga toxin between endosomes and the trans-Golgi network)

RN 304684-77-3 CAPLUS



CN Benzaldehyde, 4-hydroxy-3-methoxy-,  
2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA  
INDEX NAME)



REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:631491 CAPLUS

DOCUMENT NUMBER: 149:44599

TITLE: Discovery of Novel Small-Molecule Inhibitors of Human  
Epidermal Growth Factor Receptor-2: Combined Ligand  
and Target-Based Approach

AUTHOR(S): Gundla, Rambabu; Kazemi, Roza; Sanam, Ramadevi;  
Muttineni, Ravikumar; Sarma, Jagarlapudi A. R. P.;  
Dayam, Raveendra; Neamati, Nouri

CORPORATE SOURCE: Department of Pharmacology and Pharmaceutical  
Sciences, School of Pharmacy, University of Southern  
California, Los Angeles, CA, USA

SOURCE: Journal of Medicinal Chemistry (2008), 51(12),  
3367-3377

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

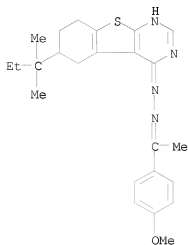
AB Consensus virtual screening models were generated and validated utilizing  
a set of known human epidermal growth factor receptor-2 (HER2) inhibitors  
and modeled HER2 active and inactive state structures. The virtual  
screening models were successfully employed to discover a set of  
structurally diverse compds. with growth inhibitory activity against  
HER2-overexpressing SKBR3 breast cancer cell line. A search of a 3D  
database containing 350000 small-mols. using the consensus models retrieved  
531 potential hits. Of the 531 hits, 57 were selected for testing in  
SKBR3 cells on the basis of structural novelty and desirable drug-like  
properties. Seven compds. inhibited growth of SKBR3 cells with IC50  
values <10  $\mu$ M. These lead compds. have desirable physicochem.  
properties and are excellent candidates for further optimization.

IT 314770-25-7 331963-00-9 1031854-58-6

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(discovery of novel small-mol. inhibitors of human EGFR-2: combined  
ligand and target-based approach)

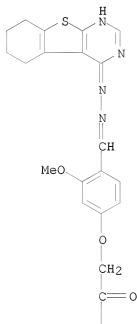
RN 314770-25-7 CAPLUS

CN Ethanone, 1-(4-methoxyphenyl)-, 2-[6-(1,1-dimethylpropyl)-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl]hydrazone (CA INDEX NAME)

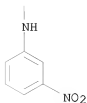


RN 331963-00-9 CAPLUS

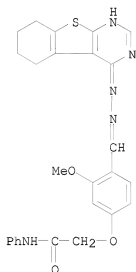
CN Acetamide, 2-[3-methoxy-4-[[2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazinylidene]methyl]phenoxy]-N-(3-nitrophenyl)- (CA INDEX NAME)



PAGE 1-A

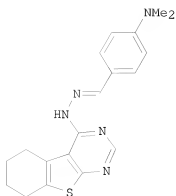


RN 1031854-58-6 CAPLUS  
 CN Acetamide, 2-[3-methoxy-4-[[2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazinylidene]methyl]phenoxy]-N-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:483184 CAPLUS  
 DOCUMENT NUMBER: 150:282962  
 TITLE: Anticonvulsant activity of thieno[2, 3-d]pyrimidines  
 AUTHOR(S): Bhaskar, V. H.; Kumar, M.; Sangameswaran, B.; Balakrishnan, B. R.  
 CORPORATE SOURCE: Faculty of Pharmacy, Vinayaka Missions University, Salem, 636 008, India  
 SOURCE: International Journal of Chemical Sciences (2007), 5(5), 2076-2084  
 CODEN: IJCSIL; ISSN: 0972-768X  
 PUBLISHER: Sadguru Publications  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



I

AB 2-Amino-4,5,6,7-tetrahydro-1-benzothiophene-3-carboxylic acid was treated with formamide to give 5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidine-4(3H)-one. This was treated with phosphorus oxychloride to give 4-chloro-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidine, which underwent hydrazination to give 4-hydrazino-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidine. The resulting hydrazinobenzo[1]benzothienopyrimidine derivative underwent condensation with aromatic aldehydes in ethanol to yield the corresponding Schiff bases, e.g., I. The structures of compds. have been established based on their anal. and spectral data. All the compds. have been screened for anticonvulsant activity. Compound I exhibited good anticonvulsant activity.

IT 81154-29-2P 298207-72-4P 300815-15-0P

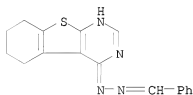
315677-57-7P 850720-55-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and anticonvulsant activity of thienopyrimidines via cyclocondensation of aminotetrahydrobenzothiophenecarboxylic acid followed by chlorination, hydrazination and condensation with benzaldehydes)

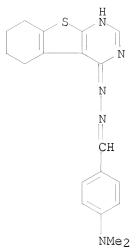
RN 81154-29-2 CAPLUS

CN Benzaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



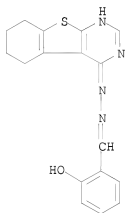
RN 298207-72-4 CAPLUS

CN Benzaldehyde, 4-(dimethylamino)-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



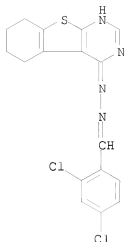
RN 300815-15-0 CAPLUS

CN Benzaldehyde, 2-hydroxy-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)

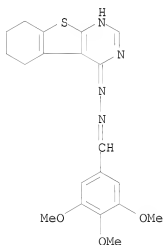


RN 315677-57-7 CAPLUS

CN Benzaldehyde, 2,4-dichloro-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



RN 850720-55-7 CAPLUS  
CN INDEX NAME NOT YET ASSIGNED



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2008:127106 CAPLUS  
DOCUMENT NUMBER: 150:20062  
TITLE: Synthesis and biological activities of Schiff bases of 5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-ylhydrazones  
AUTHOR(S): Bhaskar, V. H.; Gokulan, P. D.  
CORPORATE SOURCE: Sri RNS Institute of Pharmaceutical Sciences and Technology, Gwalior, 454 001, India  
SOURCE: Oriental Journal of Chemistry (2007), 23(3), 999-1004  
CODEN: OJCHEG; ISSN: 0970-020X  
PUBLISHER: Oriental Scientific Publishing Co.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 150:20062  
AB Et 2-amino-4,5,6,7-tetrahydro-1-benzothiophene-3-carboxylate was treated

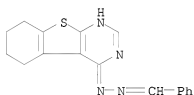
with formamide to get 5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4(3H)-one. This was treated with phosphorus oxychloride to get 4-chloro-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidine. This was refluxed with 80% hydrazine hydrate in butanol yielded 4-hydrazino-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidine. This was treated with different aromatic aldehydes in ethanol to yield the corresponding Schiff bases. The structures of compds. were established based on their anal. and spectral data. All the compds. were screened for analgesic, antibacterial, and antifungal activity. Compds. 2,4-dichloro-4-dimethylaminobenzaldehyde-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl-hydrazones showed good analgesic activity. Compound 4-dimethylaminobenzaldehyde-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl-hydrazone was most active against bacterial strains *Staphylococcus aureus* and *Pseudomonas aeruginosa*. Compound 2,4-dichlorobenzaldehyde-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl-hydrazone was most active against both the fungal strains *Candida albicans* and *Rhizopus stolonifer*.

IT 81154-29-2P 298207-72-4P 300815-15-0P  
315677-57-7P 850720-55-7P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation, and analgesic, antibacterial, and antifungal activities of Schiff bases of aryl-tetrahydrobenzothienopyrimidinyl-hydrazones)

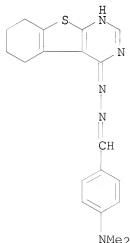
RN 81154-29-2 CAPLUS

CN Benzaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



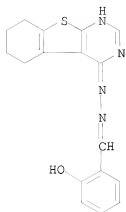
RN 298207-72-4 CAPLUS

CN Benzaldehyde, 4-(dimethylamino)-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



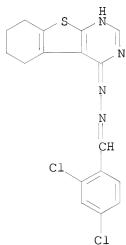
RN 300815-15-0 CAPLUS

CN Benzaldehyde, 2-hydroxy-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



RN 315677-57-7 CAPLUS

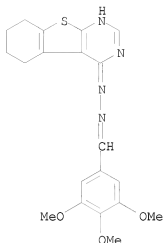
CN Benzaldehyde, 2,4-dichloro-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



RN 850720-55-7 CAPLUS

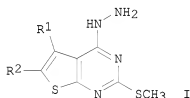
CN INDEX NAME NOT YET ASSIGNED





REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:1034373 CAPLUS  
 DOCUMENT NUMBER: 149:267995  
 TITLE: Synthesis of some azolothienopyrimidines from 4-chloropyrimidines  
 AUTHOR(S): Abu-Zied, Kh. M.; Hussein, H. A. R.  
 CORPORATE SOURCE: Photochemistry Department (Heterocyclic Unit), National Research Centre, Cairo, Egypt  
 SOURCE: Egyptian Journal of Chemistry (2006), 49(6), 683-697  
 CODEN: EGJCA3; ISSN: 0449-2285  
 PUBLISHER: National Information and Documentation Centre  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 149:267995  
 GI



AB 2-Methylthio-5-methyl-6-phenylthieno[2,3-d]pyrimidine-4(3H)-one and 2-methylthio-5,6,7,8-tetrahydrobenzothieno[2,3-d]pyrimidine-4(3H)-one reacted with phosphorus oxychloride to give the corresponding 4-chloropyrimidine derivs. Compound latter compds. reacted with primary aromatic amines, anthranilic acid and hydrazine hydrate to give thienopyrimidine derivs, e.g, I (R1R2 = -(CH2)4- and R1 = CH3, R2 = Ph). Compds. I (R1R2 = -(CH2)4- and R1 = CH3, R2 = Ph) could be converted into the triazolo and tetrazolo pyrimidines derivs. when heated with carbon disulfide or nitrous acid, resp. 4-Aminopyrimidine derivs. could be synthesis by the reduction of tetrazolothieno pyrimidine with zinc dust. On the other hand, compound I (R1R2 = -(CH2)4- and R1 = CH3, R2 = Ph) reacted with aromatic aldehydes to afford the arylhydrazones derivs. Arylhydrazone

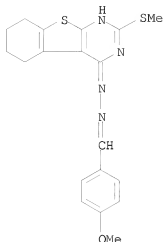
IT 1046147-69-6P 1046147-70-9P 1046147-71-0P

1046147-82-3P 1046147-88-9P

```
(preparation of thienopyrimidine derivs. using chlorothienopyrimidinones as
intermediates via substitution and/or cyclization as key steps)
```

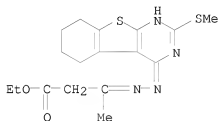
CN Benzaldehyde, 2-[5,6,7,8-tetrahydro-2-(methylthio)[1]benzothieno[2,3-

CN Benzaldehyde, 4-methoxy-, 2-[5,6,7,8-tetrahydro-2-(methylthio)[1]benzothieno[2,3-d]pyrimidin-4-yl]hydrazone (CA INDEX NAME)



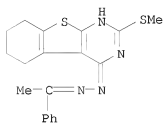
RN 1046147-82-3 CAPLUS

CN Butanoic acid, 3-[2-[5,6,7,8-tetrahydro-2-(methylthio)[1]benzothieno[2,3-d]pyrimidin-4-yl]hydrazinylidene]-, ethyl ester (CA INDEX NAME)



RN 1046147-88-9 CAPLUS

CN Ethanone, 1-phenyl-, 2-[5,6,7,8-tetrahydro-2-(methylthio)[1]benzothieno[2,3-d]pyrimidin-4-yl]hydrazone (CA INDEX NAME)



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:61833 CAPLUS

DOCUMENT NUMBER: 146:156276

TITLE: Cellular cholesterol absorption modifiers

INVENTOR(S): Gardiner, Elisabeth M.; Duron, Wergio G.; Massari, Mark E.; Severance, Daniel L.; Semple, Joseph E.; Smith, Nicholas D.

PATENT ASSIGNEE(S): Kalypsys, Inc., USA  
 SOURCE: PCT Int. Appl., 76pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007008529	A2	20070118	WO 2006-US26197	20060706
WO 2007008529	A3	20070823		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
PRIORITY APPLN. INFO.:			US 2005-697687P	P 20050708
			US 2005-727652P	P 20051017
			US 2006-781972P	P 20060313

OTHER SOURCE(S): MARPAT 146:156276

AB The present invention relates to compds. and methods useful as inhibitors of cholesterol absorption for the treatment or prevention of cholesterol-related diseases, such as atherosclerosis (Markush structures given). Fifty-two novel aromatic diaza derivs. that prevent cholesterol absorption by inhibition of NPC1L1 were prepared and their antihypercholesterolemic activity is shown.

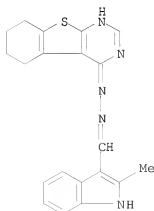
IT 441742-93-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

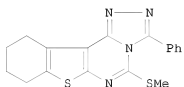
(cellular cholesterol absorption modifiers)

RN 441742-93-4 CAPLUS

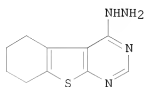
CN 1H-indole-3-carboxaldehyde, 2-methyl-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



L17 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:1301763 CAPLUS  
 DOCUMENT NUMBER: 146:229292  
 TITLE: Synthesis and antimicrobial evaluation of some new  
 thienopyrimidine derivatives  
 AUTHOR(S): Bhuiyan, M. Mosharef Hossain; Rahman, Khandker M.  
 Mizanur; Hossain, M. Kamrul; Rahim, Abdur; Hossain,  
 Mohammed Ismail; Abu Naser, Mohammad  
 CORPORATE SOURCE: Department of Chemistry, University of Chittagong,  
 Chittagong, 4331, Bangladesh  
 SOURCE: Acta Pharmaceutica (Zagreb, Croatia) (2006), 56(4),  
 441-450  
 CODEN: ACPHEE; ISSN: 1330-0075  
 PUBLISHER: Croatian Pharmaceutical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 146:229292  
 GI

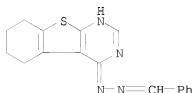


I



II

AB Reaction of heteroarom. o-aminonitrile with Et  
 N-[bis(methylthio)methylene]amino acetate resulted in annelation of a  
 thieno[3,2-e]imidazo[1,2-c]pyrimidine moiety in a one step process.  
 [1,2,4]Triazolo[4,3-c]thieno-[3,2-e]pyrimidine derivs., e.g., I, were  
 prepared by initial treatment of o-aminonitrile with carbon disulfide,  
 followed by methylation with Me iodide and subsequent reaction with  
 benzhydrazide and thiosemicarbazide, resp.  
 Hydrazinothieno[2,3-d]pyrimidine II was prepared by cyclization of  
 heteroarom. o-aminoester with formamide, followed by chlorination and  
 subsequent displacement with hydrazine. Treatment of II with  
 acetylacetone, benzaldehyde and acetic anhydride afforded  
 pyrazolylpyrimidine, benzylidenehydrazonopyrimidine, and  
 triazolopyrimidine derivs., resp. Some of these derivs. exhibited  
 pronounced antimicrobial activity.  
 IT 81154-29-2P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation)  
 (preparation and antimicrobial activity of thienopyrimidines)  
 RN 81154-29-2 CAPLUS  
 CN Benzaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-  
 yl)hydrazone (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2006:922111 CAPLUS  
DOCUMENT NUMBER: 145:306767  
TITLE: Thienyl compounds for treating virus-related conditions  
INVENTOR(S): Olivo, Paul D.; Buscher, Benjamin A.; Dyall, Julie; Jockel-Balsarotti, Jennifer I.; O'Guin, Andrew K.; Roth, Robert M.; Franklin, Gary W.; Starkey, Gale W.  
PATENT ASSIGNEE(S): Apath, LLC, USA  
SOURCE: PCT Int. Appl., 343pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2006093518	A2	20060908	WO 2005-US22559	20050625
WO 2006093518	A3	20070322		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

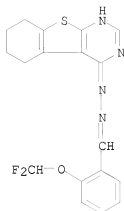
PRIORITY APPLN. INFO.: US 2004-582996P P 20040625  
OTHER SOURCE(S): MARPAT 145:306767

AB The invention discloses thienyl compds. (particularly (thien-2-yl)amino compds.), pharmaceutical compns. and kits comprising such compds., and uses of such compds. for preparing medicaments and treating virus-related conditions in animals.

IT 303793-31-9  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(thienyl compds. for treating virus-related conditions)

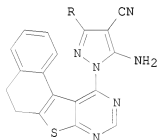
RN 303793-31-9 CAPLUS

CN Benzaldehyde, 2-(difluoromethoxy)-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:146408 CAPLUS  
 DOCUMENT NUMBER: 145:471480  
 TITLE: Synthesis of some biologically active pyrazoles and C-nucleosides  
 AUTHOR(S): El-Sayed Rashad, Aymn; Shamroukh, Ahmed Hussien; Hegab, Mohamed Ibrahim; Awad, Hassan Mohamed  
 CORPORATE SOURCE: Photochemistry Department, National Research Centre, Cairo, Egypt  
 SOURCE: Acta Chimica Slovenica (2005), 52(4), 429-434  
 CODEN: ACSLE7; ISSN: 1318-0207  
 PUBLISHER: Slovenian Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 145:471480  
 GI



I

AB (5,6-Dihydronaphtho[1',2':4,5]thieno[2,3-d]pyrimidin-11-yl)-hydrazine was used as a precursor for preparation of some novel 1-(5,6-dihydronaphtho[1',2':4,5]thieno[2,3-d]pyrimidin-11-yl)-pyrazole derivs., e.g., I (R = H or CN). Also, some acyclic and cyclic C-nucleosides were prepared by treating the same starting heterocyclic hydrazine with aldoses. Some of the prepared products showed potent antimicrobial activity.  
 IT 913654-16-7P 913654-17-8P 913654-18-9P  
 913654-19-0P  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

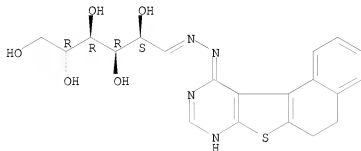
(preparation and antimicrobial activity of thienopyrimidinyl C-nucleosides via condensation of thienopyrimidinyl hydrazine derivative with glucose or ribose followed by intramol. heterocyclization and Dimroth type rearrangement)

RN 913654-16-7 CAPLUS

CN D-Glucose, (5,6-dihydronaphtho[1',2':4,5]thieno[2,3-d]pyrimidin-11-yl)hydrazone (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

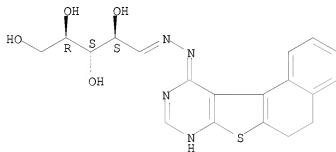


RN 913654-17-8 CAPLUS

CN D-Ribose, (5,6-dihydronaphtho[1',2':4,5]thieno[2,3-d]pyrimidin-11-yl)hydrazone (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



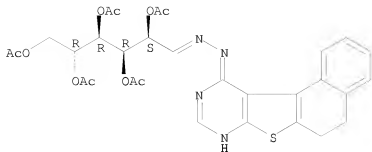
RN 913654-18-9 CAPLUS

CN D-Glucose, (5,6-dihydronaphtho[1',2':4,5]thieno[2,3-d]pyrimidin-11-yl)hydrazone, 2,3,4,5,6-pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

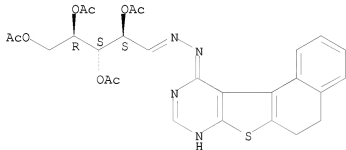
Double bond geometry unknown.





RN 913654-19-0 CAPLUS  
 CN D-Ribose, (5,6-dihydronaphtho[1',2':4,5]thieno[2,3-d]pyrimidin-11-yl)hydrazone, 2,3,4,5-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry unknown.



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:58100 CAPLUS

DOCUMENT NUMBER: 144:169467

TITLE: Chemical inhibitors of TNF signal transduction in human neutrophils point to distinct steps in cell activation

AUTHOR(S): Han, Hyunsil; Roberts, Julia; Lou, Olivia; Muller, William A.; Nathan, Noah; Nathan, Carl

CORPORATE SOURCE: Departments of Microbiology and Immunology, Weill Medical College of Cornell University, New York, NY, USA

SOURCE: Journal of Leukocyte Biology (2006), 79(1), 147-154  
 CODEN: JLBIE7; ISSN: 0741-5400

PUBLISHER: Federation of American Societies for Experimental Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Chemical screening identified three small compds. that selectively inhibited activation of the respiratory burst (RB) of human neutrophils in response to tumor necrosis factor (TNF) and formylated peptide but not phorbol ester and spared the ability of neutrophils to kill bacteria. These compds. partially inhibited TNF-triggered cytoskeletal rearrangements without blocking adhesion or transmigration of polymorphonuclear neutrophils through TNF-activated monolayers of endothelial cells. The compds. were nontoxic to neutrophils and endothelial cells. They had no

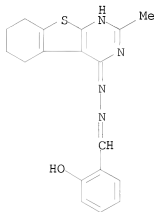
direct inhibitory effect on the tyrosine kinases Src, Syk, or Pyk2. However, their differential effects on cell spreading, bacteria-induced RB, TNF-induced degranulation, TNF-induced protein tyrosine phosphorylation, and TNF-induced Syk activation suggested that each may act on different elements of neutrophil signaling pathways.

IT 298208-03-4 301326-51-2

RL: BSU (Biological study, unclassified); BIOL (Biological study) (chemical inhibitors of TNF signal transduction in human neutrophils point to distinct steps in cell activation)

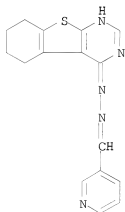
RN 298208-03-4 CAPLUS

CN Benzaldehyde, 2-hydroxy-, 2-(5,6,7,8-tetrahydro-2-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



RN 301326-51-2 CAPLUS

CN 3-Pyridinecarboxaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

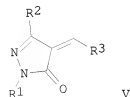
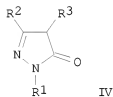
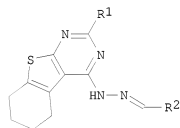
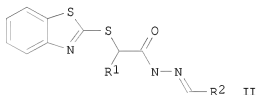
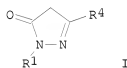
ACCESSION NUMBER: 2005:369234 CAPLUS

DOCUMENT NUMBER: 142:404249

TITLE: Treating an inflammatory disorder or inhibiting respiratory burst in adherent neutrophils with chemical inhibitors of neutrophil activation

INVENTOR(S): Han, Hyunsil; Lin, Gang; Nathan, Carl F.  
 PATENT ASSIGNEE(S): Cornell Research Foundation, Inc., USA  
 SOURCE: PCT Int. Appl., 77 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005037213	A2	20050428	WO 2004-US33914	20041014
WO 2005037213	A3	20060713		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20070021448	A1	20070125	US 2006-575683	20060831
PRIORITY APPLN. INFO.:			US 2003-510843P	P 20031014
			WO 2004-US33914	W 20041014
OTHER SOURCE(S):			MARPAT 142:404249	
GI				



AB The present invention relates to a method of treating an inflammatory disorder in a subject with an effective amount of compound having the general formula I-V as described in the present application, under conditions

effective to treat the inflammatory disorder. The present invention also relates to a method of inhibiting respiratory burst in neutrophils without inhibiting degranulation in or bacterial killing by the neutrophils by contacting neutrophils with the compds. described above. A combinatorial library of 15,000 compds. was screened for specific inhibitors of TNF- and PMA-triggered H2O2 release by primary human neutrophils. A small number of compds. were identified as capable of inhibiting TNF-triggered respiratory burst, as measured by H2O2 release, without inhibiting PMA-triggered respiratory burst.

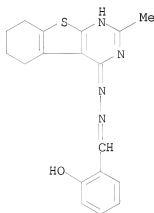
IT 298208-03-4 301326-51-2

RL: BSU (Biological study, unclassified); CST (Combinatorial study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); USES (Uses)

(treatment of inflammatory disorder or inhibition of respiratory burst in adherent neutrophils with chemical inhibitors of neutrophil activation)

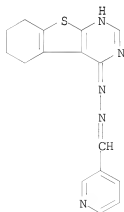
RN 298208-03-4 CAPLUS

CN Benzaldehyde, 2-hydroxy-, 2-(5,6,7,8-tetrahydro-2-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



RN 301326-51-2 CAPLUS

CN 3-Pyridinecarboxaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:324289 CAPLUS

DOCUMENT NUMBER: 142:367707

TITLE: Hedgehog pathway antagonists for treatment of proliferative disorders

INVENTOR(S): Beachy, Philip A.; Chen, James K.; Taipale, Anssi J.

PATENT ASSIGNEE(S): The Johns Hopkins University, USA

SOURCE: PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE: Patent

FAMILY ACC. NUM. COUNT: English

PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005033288	A2	20050414	WO 2004-US32482	20040929
WO 2005033288	A3	20051013		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20070232661	A1	20071004	US 2007-573945	20070307
PRIORITY APPLN. INFO.:			US 2003-507164P	P 20030929
			WO 2004-US32482	W 20040929

OTHER SOURCE(S): MARPAT 142:367707

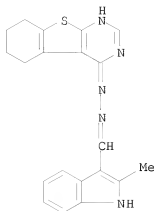
AB Aromatic compds. for treating various diseases and pathologies are disclosed. The methods for use of such compds. are also provided. Accordingly, the present invention makes available methods and compns. for inhibiting aberrant growth states resulting from hedgehog gain-of-function, ptc loss-of-function or smoothened gain-of-function.

IT 441742-93-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aromatic compds. for treatment of cell proliferative disorders by inhibiting hedgehog signaling)

RN 441742-93-4 CAPLUS

CN 1H-Indole-3-carboxaldehyde, 2-methyl-,  
2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



L17 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:571018 CAPLUS

DOCUMENT NUMBER: 141:390506

TITLE: Chemical genetic screening identifies sulfonamides that raise organellar pH and interfere with membrane traffic

AUTHOR(S): Nieland, Thomas J. F.; Feng, Yan; Brown, Jing Xu; Chuang, Tuan Daniel; Buckett, Peter D.; Wang, Jin; Xie, Xiao-Song; McGraw, Timothy E.; Kirchhausen, Tomas; Wessling-Resnick, Marianne

CORPORATE SOURCE: Department of Cell Biology and The CBR Institute for Biomedical Research, Harvard Medical School, Boston, MA, 02115, USA

SOURCE: Traffic (Oxford, United Kingdom) (2004), 5(7), 478-492  
CODEN: TRAFFA; ISSN: 1398-9219

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal

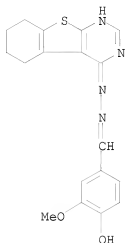
LANGUAGE: English

AB Chemical genetics seeks to identify small mols. that afford functional dissection of cell biol. pathways. Previous screens for small mol. inhibitors of exocytic membrane traffic yielded the identification and characterization of several compds. that block traffic from the Golgi to the cell surface as well as transport from the endoplasmic reticulum to the Golgi network. Here, we screened these inhibitors for potential effects on endocytic membrane traffic. Two structurally related sulfonamides were potent and reversible inhibitors of transferrin-mediated iron uptake. These inhibitors do not block endoplasmic reticulum-to-Golgi transport, but do disrupt Golgi-to-cell surface traffic. The compds. are members of a novel class of sulfonamides that elevate endosomal and lysosomal pH, down-regulate cell surface receptors, and impair recycling of internalized transferrin receptors to the plasma membrane. In vitro expts. revealed that the sulfonamides directly inhibit ATP hydrolysis by the V-ATPase and that they also possess a potent proton ionophore activity. While maintenance of organellar pH is known to be a critical factor in both endocytosis and exocytosis, the precise role of acidification, beyond the uncoupling of ligands from their receptors, remains largely unknown. Identification of this novel class of sulfonamide inhibitors provides new chemical tools to better understand the function of organelle pH in membrane traffic and the activity of V-ATPases in particular.

IT 304684-77-3

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(sulfonamides that raise organellar pH and interfere with membrane

traffic)  
RN 304684-77-3 CAPLUS  
CN Benzaldehyde, 4-hydroxy-3-methoxy-,  
2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA  
INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:442807 CAPLUS

DOCUMENT NUMBER: 141:135501

TITLE: Retrograde transport of cholera toxin from the plasma  
membrane to the endoplasmic reticulum requires the  
trans-Golgi network but not the Golgi apparatus in  
Exo2-treated cells

AUTHOR(S): Feng, Yan; Jadhav, Ashutosh P.; Rodighiero, Chiara;

CORPORATE SOURCE: Fujinaga, Yukako; Kirchhausen, Tomas; Lencer, Wayne I.  
Department of Cell Biology, Institute of Chemistry and  
Cell Biology, Harvard Medical School, Boston, MA,  
02115, USA

SOURCE: EMBO Reports (2004), 5(6), 596-601

CODEN: ERMEAX; ISSN: 1469-221X

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

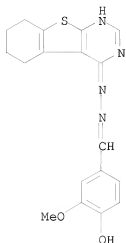
LANGUAGE: English

AB Cholera toxin (CT) follows a glycolipid-dependent entry pathway from the  
plasma membrane through the trans-Golgi network (TGN) to the endoplasmic  
reticulum (ER) where it is retro-translocated into the cytosol to induce  
toxicity. Whether access to the Golgi apparatus is necessary for transport to  
the ER is not known. Exo2 is a small chemical that rapidly blocks  
anterograde traffic from the ER to the Golgi and selectively disrupts the  
Golgi apparatus but not the TGN. Here we use Exo2 to determine the role of the  
Golgi apparatus in CT trafficking. We find that under the condition of  
complete Golgi ablation by Exo2, CT reaches the TGN and moves efficiently  
into the ER without loss in toxicity. We propose that even in the absence  
of Exo2 the glycolipid pathway that carries the toxin from plasma membrane  
into the ER bypasses the Golgi apparatus entirely.

IT 304684-77-3, Exo 2

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(retrograde transport of cholera toxin from plasma membrane to  
endoplasmic reticulum requires trans-Golgi network but not Golgi apparatus

in Exo2-treated cells)  
 RN 304684-77-3 CAPLUS  
 CN Benzaldehyde, 4-hydroxy-3-methoxy-,  
 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA  
 INDEX NAME)



L17 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:570813 CAPLUS  
 DOCUMENT NUMBER: 139:113668  
 TITLE:  $\beta$ -secretase inhibitors for use in treatment of  
 diseases caused by deposits of  $\beta$ -amyloid peptides  
 INVENTOR(S): Dietrich, Axel; Nimz, Olaf; Rester, Ulrich; Fecke,  
 Wolfgang; Haemmerle, Marcus; Baier, Friedrich  
 PATENT ASSIGNEE(S): The Genetics Company Inc., Switz.  
 SOURCE: PCI Int. Appl., 42 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003059346	A1	20030724	WO 2003-EP504	20030120
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TG, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
CA 2473441	A1	20030724	CA 2003-2473441	20030120
AU 2003205630	A1	20030730	AU 2003-205630	20030120
EP 1467729	A1	20041020	EP 2003-702474	20030120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 200551967	T	20050609	JP 2003-559508	20030120
US 20050239899	A1	20051027	US 2005-502075	20050418

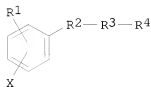


PRIORITY APPLN. INFO.:

EP 2002-1339  
EP 2002-12566  
WO 2003-EP504

A 20020118  
A 20020605  
W 20030120

OTHER SOURCE(S): MARPAT 139:113668  
GI

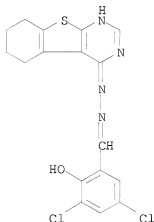


AB The invention relates to novel substituted halophenyl inhibitors of  $\beta$ -secretase (II, R1 = halo, hydroxy, cyano, trifluoromethyl, C1-4 substituted saturated or unsatd. alkyl, n = 0-4; X = halo, Me, trifluoromethyl; R2 = C1-8 alkyl containing at least one heteroatom and optionally unsatd.; R3 = aryl, carbocycle or heterocycle; R4 = R1 or a substituted aryl or heterocycle) and their use in treatment of diseases caused by deposits of  $\beta$ -amyloid, such as Alzheimer's disease. Thus, 7 compds. with IC50 10-170  $\mu$ M in in vitro  $\beta$ -secretase assays are disclosed.

IT 312528-59-9  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta$ -secretase inhibitors for use in treatment of diseases caused by deposits of  $\beta$ -amyloid peptides)

RN 312528-59-9 CAPLUS

CN Benzaldehyde, 3,5-dichloro-2-hydroxy-,  
2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:395442 CAPLUS

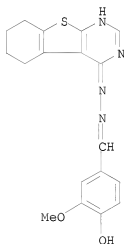
DOCUMENT NUMBER: 139:270180

TITLE: Phenotypic screening of small molecule libraries by high throughput cell imaging

AUTHOR(S): Yarrow, J. C.; Feng, Y.; Perlman, Z. E.; Kirchhausen, T.; Mitchison, T. J.  
CORPORATE SOURCE: Institute of Chemistry and Cell Biology, Harvard Medical School, Boston, MA, 02115, USA  
SOURCE: Combinatorial Chemistry and High Throughput Screening (2003), 6(4), 279-286  
CODEN: CCHSFU; ISSN: 1386-2073  
PUBLISHER: Bentham Science Publishers Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB We have developed high throughput fluorescence cell imaging methods to screen chemical libraries for compds. with effects on diverse aspects of cell physiol. We describe screens for compds. that arrest cells in mitosis, that block cell migration, and that block the secretory pathway. Each of these screens yielded specific inhibitors for research use, and the mitosis screen identified Eg5 as a potential target protein for cancer chemotherapy. Cell imaging provides a large amount of information from primary screening data that can be used to distinguish compds. with different effects on cells, and together with automated anal., to quantitate compound effects.

IT 304684-77-3  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(phenotypic screening of small mol. libraries by high throughput cell imaging)  
RN 304684-77-3 CAPLUS  
CN Benzaldehyde, 4-hydroxy-3-methoxy-,  
2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:504794 CAPLUS

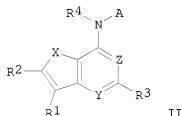
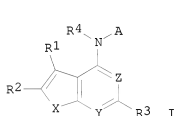
DOCUMENT NUMBER: 137:63255

TITLE: Preparation of thieno[2,3-d]pyrimidine derivatives as cyclin-dependent kinase 4 (Cdk4) inhibitors having antitumor activity owing to cell cycle regulation  
INVENTOR(S): Uoto, Kouichi; Horiuchi, Takao; Akabane, Kouichi; Takeda, Yasuyuki  
PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 241 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051849	A1	20020704	WO 2001-JP11354	20011225
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002216406	A1	20020708	AU 2002-216406	20011225
PRIORITY APPLN. INFO.:				
			JP 2000-394169	A 20001226
			WO 2001-JP11354	W 20011225

OTHER SOURCE(S): MARPAT 137:63255  
 GI



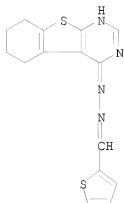
AB Comps. of the general formula (I) or (II) or salts thereof: [wherein X = S, O, NR5 (wherein R5 = H, alkyl); Y = N, CH; Z = N, CR6 (wherein R6 = H, halo, alkyl, etc.); R1, R2 = H, alkyl, alkoxy, alkenyl, alkynyl, aryl, aralkyl, acyl, mercapto, alkylthio, alkylsulfinyl, alkylsulfonyl, amino, mono- or dialkylamino, CONH2, mono- or dialkylcarbonyl, or R1 and R2 are linked to each other to form an (un)substituted 3- to 7-membered hydrocarbon or heterocyclic ring; R3 = H, (un)substituted alkyl or aryl; R4 = H, (un)substituted alkyl; and A is a group represented by the general formula -N:CR7R8, Q, Q1 [wherein R7 = H, (un)substituted alkyl; R8 = (un)substituted alkyl, aryl, or heterocyclyl; ring B = aryl or heteroaryl ring condensed to cyclohexane ring]] are prepared. Thus, to a solution of 6-tert-butyl-4-hydrizinethieno[2,3-d]pyrimidine ad in anhydrous benzene was added anhydrous Na2SO4 and heated at 100° with stirring for 2.5 h 1-(2-formylthiazol-4-ylmethyl)ethylcarbamate acid tert-Bu ester to give, after deprotection, 4-(1-aminoethyl)thiazole-2-carboxaldehyde N-[6-tert-butylthieno[2,3-d]pyrimidin-4-yl]hydrazone dihydrochloride (III). III showed IC50 of 0.019 and 0.83 µg/mL against Cdk4 and Cdk2, resp.

IT 81154-31-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

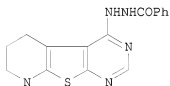
(preparation of thieno[2,3-d]pyrimidine derivs. as cyclin-dependent kinase 4 (Cdk4) inhibitors having antitumor activity owing to cell cycle regulation)

RN 81154-31-6 CAPLUS  
 CN 2-Thiophenecarboxaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)

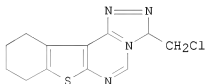


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1995:883915 CAPLUS  
 DOCUMENT NUMBER: 123:329366  
 ORIGINAL REFERENCE NO.: 123:58769a,58772a  
 TITLE: Synthesis and antimicrobial activity of some tetramethylenethieno[2,3-d]pyrimidine derivatives  
 AUTHOR(S): Ismail, Khadiga A.; Aboulwafa, Omaira M.; Koreish, Essam  
 CORPORATE SOURCE: Dep. Pharmaceutical Chemistry, Faculty Pharmacy, University Alexandria, Alexandria, Egypt  
 SOURCE: Farmaco (1995), 50(9), 611-16  
 CODEN: FRMCE8  
 PUBLISHER: Societa Chimica Italiana  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 123:329366  
 GI



I



II

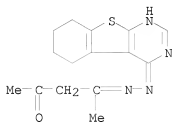
AB A series of tetramethylenethieno[2,3-d]pyrimidine derivs. has been synthesized and tested for its antimicrobial properties. All the synthesized compds. were found to exhibit in vitro antibacterial and/or antifungal activity. The highest activity was elicited by 4-benzohydrazino-5,6-tetramethylenethieno[2,3-d]pyrimidine (I) showing MIC value of 7.81 µg/mL against E. Coli and C. albicans, while its MBC value was half that of nystatin. Compound II was almost as potent as nystatin, exhibiting a min. bactericidal concentration (MBC) value of 15.62 µg/mL.  
 IT 170382-36-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(tetramethyleneethienopyrimidine derivative preparation and antimicrobial activity)

RN 170382-36-2 CAPLUS

CN 2,4-Pentanedione, 2-[2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone] (CA INDEX NAME)



IT 170382-28-2P 170382-29-3P 170382-30-6P

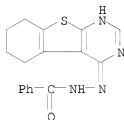
170382-32-8P 170382-37-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(tetramethyleneethienopyrimidine derivative preparation and antimicrobial activity)

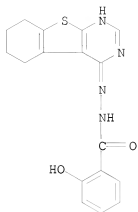
RN 170382-28-2 CAPLUS

CN Benzoic acid, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazide (CA INDEX NAME)



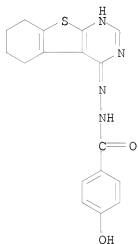
RN 170382-29-3 CAPLUS

CN Benzoic acid, 2-hydroxy-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazide (CA INDEX NAME)



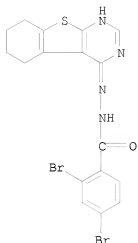
RN 170382-30-6 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazide (CA INDEX NAME)



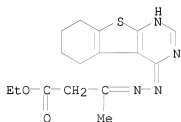
RN 170382-32-8 CAPLUS

CN Benzoic acid, 2,4-dibromo-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazide (CA INDEX NAME)



RN 170382-37-3 CAPLUS

CN Butanoic acid, 3-[2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazinylidene]-, ethyl ester (CA INDEX NAME)

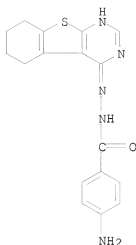


IT 170382-31-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(tetramethyleneethienopyrimidine derivative preparation and antimicrobial activity)

RN 170382-31-7 CAPLUS

CN Benzoic acid, 4-amino-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazide (CA INDEX NAME)



L17 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:292065 CAPLUS

DOCUMENT NUMBER: 122:133103

ORIGINAL REFERENCE NO.: 122:24823a,24826a

TITLE: Synthesis of certain thienopyrimidines of anticipated analgesic activity

AUTHOR(S): Moneer, A. A.; Ismail, M. Mhsen.; Osman, A. N.; El-Fattah, B. Abd; Ghoneim, K. M.

CORPORATE SOURCE: Faculty Pharmacy, Cairo University, Cairo, Egypt  
SOURCE: Egyptian Journal of Pharmaceutical Sciences (1994), Volume Date 1993, 34(4-6), 623-41

CODEN: EJPSBZ; ISSN: 0301-5068

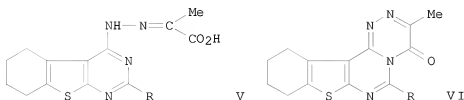
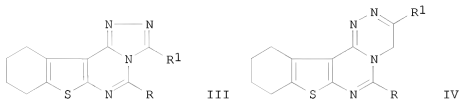
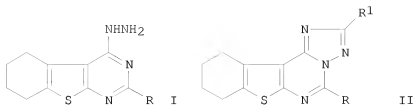
PUBLISHER: National Information and Documentation Centre

DOCUMENT TYPE: Journal

LANGUAGE: English

GI





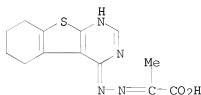
AB Hydrazinothienopyrimidines I (R = H, Me, benzyl) were prepared using reported procedures. Reaction of I with acid chlorides, acetic anhydride or carbon disulfide afforded triazolothienopyrimidines II (R = same as above; R1 = SH, Ph, Me, o-, m-, p-ClC6H4, o-, p-BrC6H4, p-O2NC6H4). On the other hand, conversion of I into Schiff bases followed by cyclization with bromine in acetic acid on cold and on hot produced the triazolothienopyrimidines III and II, resp. Reaction of I with  $\alpha$ -bromoketones yielded the thienopyrimidotriazines IV. Conversely, when pyruvic acid was introduced to react with I the open hydrazones V rather than the expected cyclic structures VI were produced. The new compds. exhibited analgesic activity half that of aspirin.

IT 160887-39-8P 160887-40-1P 160887-41-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

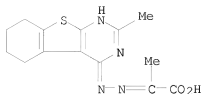
RN 160887-39-8 CAPLUS

Propanoic acid, 2-[2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazinyldene]- (CA INDEX NAME)



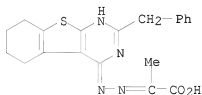
RN 160887-40-1 CAPLUS

CN Propanoic acid, 2-[2-(5,6,7,8-tetrahydro-2-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazinylidene]- (CA INDEX NAME)



RN 160887-41-2 CAPLUS

CN Propanoic acid, 2-[2-[5,6,7,8-tetrahydro-2-(phenylmethyl)-1[benzothieno[2,3-d]pyrimidin-4-yl]hydrazinylidene)- (CA INDEX NAME)



L17 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:656112 CAPLUS

DOCUMENT NUMBER: 115:256112

ORIGINAL REFERENCE NO.: 115:43549a,43552a

TITLE: Synthesis of 7-methyl-4-substituted-5,6,7,8-tetrahydrobenzo[b]thieno[2,3-d]pyrimidines as antimicrobial agents

AUTHOR(S): Patil, C. D.; Sadana, G. S.; Deodhar, K. D.  
CORPORATE SOURCE: Dep. Chem., G. N. Khalsa Coll., Bombay, 400 019, India  
SOURCE: Journal of the Indian Chemical Society (1991), 68(3), 169-71

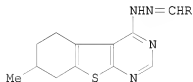
CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:256112

GI



I

AB Title tetrahydrobenzothienopyrimidines, e.g. I (C6H4Cl-4, C6H4NO2-2, C6H4CN-4), were prepared and their antibacterial activities were discussed.

IT 137438-25-6P 137438-26-7P 137438-27-8P

137438-28-9P 137438-29-0P 137438-30-3P

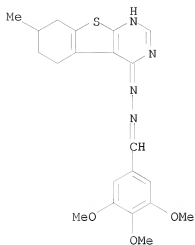
137438-31-4P 137438-32-5P 137438-33-6P

137438-34-7P 137438-35-8P 137438-36-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclization of)

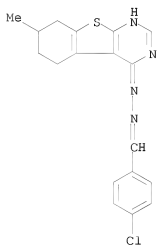
RN 137438-25-6 CAPLUS

CN Benzaldehyde, 3,4,5-trimethoxy-, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



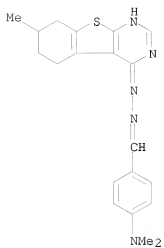
RN 137438-26-7 CAPLUS

CN Benzaldehyde, 4-chloro-, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



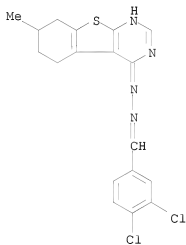
RN 137438-27-8 CAPLUS

CN Benzaldehyde, 4-(dimethylamino)-, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



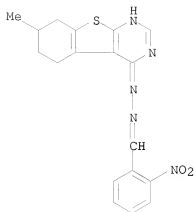
RN 137438-28-9 CAPLUS

CN Benzaldehyde, 3,4-dichloro-, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazine (CA INDEX NAME)



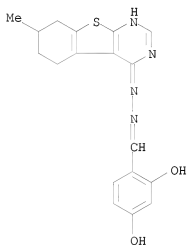
RN 137438-29-0 CAPLUS

CN Benzaldehyde, 2-nitro-, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazine (CA INDEX NAME)



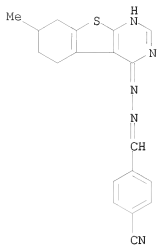
RN 137438-30-3 CAPLUS

CN Benzaldehyde, 2,4-dihydroxy-, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



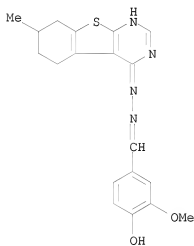
RN 137438-31-4 CAPLUS

CN Benzonitrile, 4-[[2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazinylidene]methyl]- (CA INDEX NAME)



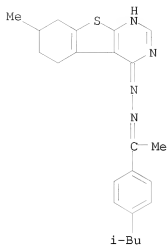
RN 137438-32-5 CAPLUS

CN Benzaldehyde, 4-hydroxy-3-methoxy-,  
2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



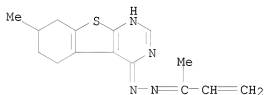
RN 137438-33-6 CAPLUS

CN Ethanone, 1-[4-(2-methylpropyl)phenyl]-,  
2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



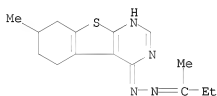
RN 137438-34-7 CAPLUS

CN 3-Buten-2-one, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



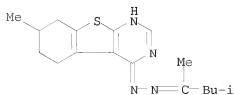
RN 137438-35-8 CAPLUS

CN 2-Butanone, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)

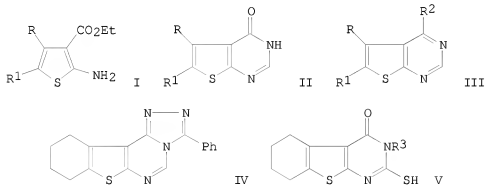


RN 137438-36-9 CAPLUS

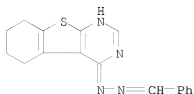
CN 2-Pentanone, 2-(5,6,7,8-tetrahydro-7-methyl[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



L17 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1982:122732 CAPLUS  
 DOCUMENT NUMBER: 96:122732  
 ORIGINAL REFERENCE NO.: 96:20157a,20160a  
 TITLE: Thieno[2,3-d]pyrimidines as potential chemotherapeutic agents. II  
 AUTHOR(S): Ram, Vishnu J.; Pandey, Hrishi Kesh; Vlietinck, Arnold J.  
 CORPORATE SOURCE: Dep. Chem., S. C. Coll., Ballia, India  
 SOURCE: Journal of Heterocyclic Chemistry (1981), 18(7), 1277-80  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 96:122732  
 GI



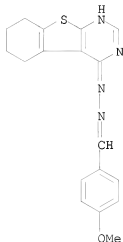
AB The thiophenecarboxylate I [RR1 = (CH2)4; R = H, R1 = Et] were cyclized with HCONH2 to give the thienopyrimidinones II, which were chlorinated and the thienopyrimidines III (R2 = Cl) aminated to give III (R3 = substituted anilines). III [RR1 = (CH2)4, R2 = Cl] was treated with H2NNH2 followed by PhCHO to give III [RR1 = (CH2)4, R2 = PhCH:NNH], which underwent cyclization to give the triazolopyrimidinobenzothiophene IV. I [RR1 = (CH2)4] was cyclized with R3NCS (R3 = Ph, PhCH2) to give the thienopyrimidines V, which were converted to the S-alkyl derivs. III [RR1 = (CH2)4, R2 = 2-oxo-3-pyrrolidinylmethylenehydrazino] showed some herbicidal activity against velvet leaf (20%).  
 IT 81154-29-2P 81154-30-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclization of)  
 RN 81154-29-2 CAPLUS  
 CN Benzaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)





RN 81154-30-5 CAPLUS

CN Benzaldehyde, 4-methoxy-, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)

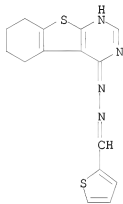


IT 81154-31-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 81154-31-6 CAPLUS

CN 2-Thiophenecarboxaldehyde, 2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazone (CA INDEX NAME)



L17 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1979:186894 CAPLUS

DOCUMENT NUMBER: 90:186894

ORIGINAL REFERENCE NO.: 90:29697a,29700a

TITLE: Thieno[2,3-d]pyrimidines as potential chemotherapeutic agents

AUTHOR(S): Ram, Vishnu Ji

CORPORATE SOURCE: Dep. Chem., S. C. Coll., Ballia, India

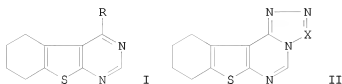
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1979),  
312(1), 19-25

CODEN: ARPMAS; ISSN: 0365-6233

DOCUMENT TYPE:

Journal

LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 90:186894  
 GI



AB Thienopyrimidines I (R = Cl, SH, NHNH<sub>2</sub>, pyrrolidinoethylamino, morpholinopropylamino, HOCH<sub>2</sub>CH<sub>2</sub>NH, (HOCH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>N, 2-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>NH, 4-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>NH, 2,4-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>NH, 2-FC<sub>6</sub>H<sub>4</sub>NH, 3-FC<sub>6</sub>H<sub>4</sub>NH, 4-FC<sub>6</sub>H<sub>4</sub>NH, 4-Et<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NH, piperidino, OEt, morpholino), II (X = N, CH, CSH, CMeCO), and related compds. were prepared from 4-oxo-5,6,7,8-tetrahydrothianaphtheno[2,3-d]pyrimidine. I (R = Cl) were herbicidal at 8 lb/acre. I (R = SH, NHNH<sub>2</sub>, NHC<sub>6</sub>H<sub>4</sub>F-2, NHC<sub>6</sub>H<sub>4</sub>F-3, NHC<sub>6</sub>H<sub>4</sub>Net-2-4) were bactericidal against *Streptococcus faecalis* at 64 ppm. I (R = 2,4-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>NH, 2-FC<sub>6</sub>H<sub>4</sub>NH) were fungicidal against *Pythium* at 64 ppm, but that was accompanied by phytotoxicity.

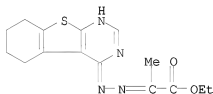
IT 70059-71-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of)

RN 70059-71-1 CAPLUS

CN Propanoic acid, 2-[2-(5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4-yl)hydrazinylidene]-, ethyl ester (CA INDEX NAME)



=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

130.72 910.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

ENTRY SESSION

CA SUBSCRIBER PRICE

-18.86 -18.86

FILE 'STNGUIDE' ENTERED AT 11:33:18 ON 27 MAR 2009  
 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
 COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Mar 20, 2009 (20090320/UP).

=> dis his

(FILE 'HOME' ENTERED AT 11:02:14 ON 27 MAR 2009)

FILE 'REGISTRY' ENTERED AT 11:02:26 ON 27 MAR 2009

L1 0 S US 20070021448 A1/PN  
L2 0 S US 20070021448/PN

FILE 'CAPLUS' ENTERED AT 11:03:21 ON 27 MAR 2009

L3 1 S US 20070021448/PN  
SEL RN

FILE 'REGISTRY' ENTERED AT 11:03:37 ON 27 MAR 2009

L4 18 S E1-E18

FILE 'CAPLUS' ENTERED AT 11:04:55 ON 27 MAR 2009

L5 150218 S L4  
L6 0 S L5 AND BENZOTHAZOLYLTHIO

FILE 'REGISTRY' ENTERED AT 11:19:10 ON 27 MAR 2009

L7 STRUCTURE UPLOADED  
L8 0 S L7 FULL  
L9 STRUCTURE UPLOADED  
L10 STRUCTURE UPLOADED  
L11 0 S L10 FULL  
L12 STRUCTURE UPLOADED  
L13 3 S L12 FULL

FILE 'CAPLUS' ENTERED AT 11:23:35 ON 27 MAR 2009

L14 0 S L13

FILE 'REGISTRY' ENTERED AT 11:24:45 ON 27 MAR 2009

L15 STRUCTURE UPLOADED  
L16 353 S L15 FULL

FILE 'CAPLUS' ENTERED AT 11:32:08 ON 27 MAR 2009

L17 23 S L16

FILE 'STNGUIDE' ENTERED AT 11:33:18 ON 27 MAR 2009

=> d cost

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	13.45
0.70	3.01
0.00	756.78
0.00	138.02
-----	-----
0.70	911.26

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-18.86

CA SUBSCRIBER PRICE

IN FILE 'STNGUIDE' AT 11:39:16 ON 27 MAR 2009

=>